

TUSZYNSKA, St.; TAUTT, J.

Microbiological determination of blood vitamin B group. Acta  
physiol pol 12 no.4:591-601 '61.

1. Z Zakladu Badania Organopreparatow i Witamin Instytutu Lekow w  
Warszawie Dyrektor: prof. dr P. Kubikowski.  
(VITAMIN B COMPLEX blood)

MYSZKOWSKA, Krystyna; TAUTT, Jadwiga; TUSZYNSKA, Stanislawa; WOZNIAK, Wanda

Determination of the vitamin-B group in yeast by microbiological  
methods. Chem anal 5 no.3:471-475 '60. (EEAI 10:8)

1. Zaklad Badania Organopreparatow i Witamin Instytutu Lekow,  
Warszawa. Dyrektor Instytutu: prof. dr. P. Kubikowski.  
(Vitamin B) (Yeast)

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001757620006-7

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001757620006-7"

TUSZYNSKA, ST.; MYSZKOWSKA, K.; WOZNIAK, W.; TAUTT, J.; LEWANDOWSKA, K.

Effect of sulfoguanidine on degree and order of inhibition of synthesis of  
digestive thiamine, ryboflavin and nicotinic acid amide in rat. Acta  
physiol. polon. 8 no.3:556-557 1957.

1. Z Zakladu Badania Organopreparatow i Witamin Instytutu Lekow w Warszawie  
Dyrektor: prof. dr P. Kubikowski.

(VITAMIN B COMPLEX, metabolism,  
eff. of sulfoguanidine in rats (Pol))  
(AMIDINES, effects,  
sulfoguanidine on vitamin B complex metab. in rats (Pol))

TUSZYNSKA St.

EXCERPTA MEDICA Sec.2 Vol.9/10 Physiology,etc. Oct56

4487. TUSZYNSKA St., MYSZKOWSKA K., WOZNIAK W., LEWANDOWSKA K.

Zakładu Badania Organopreparatów i Witamin. \*Wpływ witaminy p na  
wytrzymałość naczyń włosowatych u świń morskich z awitaminozą C.  
Effect of vit. P on the capillary resistance in guinea-  
pigs with avitaminosis C ACTA PHYSIOL. POL. 1955, 6/1 (99-106)  
Graphs 6

Capillary resistance was investigated in albino guinea-pigs with avitaminosis C  
(Sherman's diet) by Bourne's method. No effect of vit. P or C was found.

Czubalski - Warsaw

TUSZYNsKA, St; MYSZKOWsKA, K; WOZNIAK, W; LEWANDOWsKA, K.

Effect of vitamin P on capillary resistance in vitamin C deficiency in guinea pigs. Acta physiol. polon. 6 no.1:99 106 1955.

1. Z Zakladu Badania Organopreparatow i Witamin. Kierownik:  
mgr. I. Iwanowska, Instytutu Lekow w Warszawie. Dyrektor:  
prof. dr P. Kubikowski.

(CAPILLARIES,

resist., eff. of vitamin P on in exper. scurvy)  
(VITAMIN P, effects,

on capillary resist. in exper. scurvy)  
(SCURVY, experimental,

eff. of vitamin P on capillary resist. in)

TUSZYNsKA-PHLczarska, Barbara

Use of gel precipitation to differentiate acid-fast bacilli.  
Gruzlica 33 no.11:1207-1210 N 1 65.

1. Z Zakladu Mikrobiologii Instytutu Gruzlicy (Kierownik:  
doc. dr. M. Buraczewska).

TUSZYNSKI, ADAM

Samochod nowoczesny. Warszawa, Wydawnictwa Komunikacyjne, 1953.  
462 p.

POLAND

SOURCE: EAST EUROPEAN ACCESSIONS LIST LC Vol. 5, no. 7, August 1956.

Polish aircraft gasoline. B. Mielnikowa and J. Tussynski  
Przemysł Naftowy 10, 102-10, 142-5, 171-4 (1938). - Aircraft gas-  
olines derived from Polish crude oils have in general low octane  
nos. and a low content of low-boiling fractions. Hence they do  
not conform to international air service standards. On the other  
hand, they exhibit but small sensitivity toward conditions in  
which the engine works. The octane no. can be raised by a fra-  
ctional selection, by avoiding distn. losses of low-boiling fra-  
ctions and by addn. of stabilizing agent  $PbEt_4$  or  $EtOH$  can be used. Benzene is  
least suited for this purpose. Polish gasolines can be used to  
advantage in mixed fuels, being very sensitive toward addn. of  
antiknock agents.

J. Wiertelek

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001757620006-7"

TUSZYNSKI, J.

Planning of serial aircraft production. p. 2. (TECHNIKA LOTNICZA, Warszawa, Vol. 9,  
No. 1, Jan./Feb. 1954)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, June 1955,  
Uncl.

TUSZYNSKI, J.

3141

6014 004 B

Tuszynski J. *Principles of Planning Machine Tool Overhaul*.

"Zasady planowania remontów obrabiarek". *Przegląd Mechaniczny*, No. 8, 1953, pp. 276-282, 5 figs., 10 tabs.

The author emphasizes, in conjunction with instruction No. 30-A issued in June 1951 by the State Economic Planning Commission, the importance of machine tool overhaul planning methods. He deals with: — maintenance and overhaul routine; determination of overhaul requirements (substantiation of the necessity for the carrying out of repairs, details and duration of repair work cycles, amount of work entailed by overhaul operation, determining annual requirements, current adjustment of requirements); overhaul planning (type of plans: — long-term planning, monthly plans and operative planning); control over the cost of overhaul, and technical progress in overhaul methods.

TUSHUNOV, A.

New Russian materials by Marx on agrarian relations in Russia.  
Vop.ekon.no.3:114-124 Mr '56. (MLRA 9:7)  
(Land tenure--History)

TUSZYNSKI, J.

"Automation and man" by Karl Steinbuch. Reviewed by J. Tuszyński.  
Mechanik 35 no.9:527-528 '62.

3785 621-223.314  
Turzynski J., Wistniewski A. Application of an Angular Groove for M/1  
Workshop Measurements.

"Zastosowanie pryzmy w pomiarach warsztatowych". Mechanik.  
No. 3, 1954, pp. 109-113, 17 figs., 2 tabs.

When measuring rollers in an angular groove the three contact points method (i.e. three points of contact between the object measured and the measuring forces) can be employed. Ways are described of measuring in the angular groove objects of circular cross-section, or of a cross-section slightly deviating from a circle. Also given is the application of an angular groove for measuring diameters, checking deviations in shape and gauging the degree of ovalness and eccentricity.

(1)

TRZYKIER, J.

"Polishing Internal Conciil Surfaces", p. 217, (ISCHWIEK, Vol. 27, No. 4, June 1954, Warsaw, Poland)

30: Monthly List of East European Accusations, (SAIL), 1C, Vol. 4, No. 5, May 1955, Uncl.

TUSZYNSKI, J.; DZIKOWSKI, T.

"New types of Clutches for Grinding Machines", p. 219, (MECHANIK, Vol. 27,  
No. 6, June 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 5,  
May 1955, Uncl.

TURZYNSKI, J.

"Soviet Experience in High-Speed Polishing", p. 323, (CHOWARTK, Vol. 27, No. 9, Sept. 1954, Warsaw, Poland)

CC: Monthly List of East European Acquisitions, (EEL), IC, Vol. 4, No. 5, May 1955, Uncl.

TUSZYNSKI, J.

TUSZYNSKI, J. The development of the tool industry according to the 5-Year Plan.  
p. 274. Vol. 29, no. 7, July, 1956. MECHANIK, Warszawa, Poland.

SOURCE: East European Accessions List (EEAL) Vol. 6, No. 4--April 1957

TUSZYNKI, J.

Cutting screw threads by means of a universal cutting machine. p. 259.

MECHANIK. Warszawa, Poland. Vol. 12, nos. 1-2, 7-9, 12; Jan. - Feb., July-Sept., Dec. 1957.

Monthly List of East European Accessions (EEAI) LC, Vol. 9, no. 2, Feb. 1960.  
Uncl.

TUSZYNSKI, J.

Notes on the Swedish tool industry. (To be contd.) p. 161. (Mechanik, Vol. 30, No. 4, Apr 1957, Warsaw, Poland)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 8, Aug 1957. Uncl.

TUSZYNSKI, J.

Economic problems of automation in the USSR. p. 477.

MECHANIK. (Stowarzyszenie Inżynierow i Technikow Mechanikow Polskich)  
Warszawa, Poland. Vol. 31, no. 10, Oct. 1958.

Monthly list of East European Accessions Index, (EEAI), L<sup>U</sup>, Vol. 8, no. 6,  
June 1959  
unclu.

TUBZYNISKI, J.

The Hall effect and its application in the techniques of measuring and control. Pt. 1. Theory, materials, strain gauges. (To be cont'd.)  
p. 144.

FOMIARY, AUTOMATYKA, KONTROLA. Warszawa, Poland. Vol. 5, no. 2, Feb. 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, no. 8, Aug. 1959.

Uncl.

TUSZYNSKI, J.

The Hall effect and its application in the techniques of measuring and control.  
Pt. 2. Applications. p. 193.

POMIARY, AUTOMATYKA, KONTROLA. (Naczelnna Organizacja Techniczna)  
Warszawa, Poland  
Vol. 5, no. 5, May 1959

Monthly list of East European Accessions (EEAI) LC Vol. 8, no. 9  
Sept. 1959  
Uncl.

TUSZYNSKI, J.; JODELKO, Z.; TYMOWSKI, J.

Economics of automation in the machinery industry. p.533

MECHANIK. (Stowarzyszenie Inżynierów i Techników Mechaników Polskich)  
Warszawa, Poland. Vol.32, No.9, Sept. 1959.

Monthly list of East European Accession (EEAI) LC, Vol.9, no.1, Jan. 1960

Uncl.

TUSZYNISKI, J.

A conference on metal cutting in the German Democratic Republic. p. 588

MECHANIK. (STOwarzyszenie Inżynierow i Technikow Mechanikow Polskich) Warszawa,  
Poland, Vol.32, No. 9, Sept. 1959.

Monthly list of East European Accession (EEAI) LC, Vol. 9, No. 1, Jan. 1960

U<sub>ncl.</sub>

TUSZYNSKI, Jan, mgr., inz.

"Technical terminology" by Marian Mazur. Reviewed by Jan Tuszyński.  
Mechanik 34 no.1:43-44 '62.

POLAND/Magnetism - Experimental Methods of Magnetism.

F

Abs Jour : Ref Zhur Fizika, No 11, 1959, 25066

Author : Tuszynski Janusz

Inst : -

Title : Methods of Exact Measurement of Magnetic Induction  
During Investigation of Processes of Aging of Permanent  
Magnets.

Orig Pub : Pomiary, automat., kontrola, 1958, 4, No 1, 488-492

Abstract : A survey of different methods of measuring induction:  
induction, compensation, method of nuclear resonance,  
magnetic balance.

Card 1/1

- 51 -

POL'ND/Chemical Technology. Chemical Products and Their  
Application. Instruments and Automation.

H

Abs Jour: Ref Zhur-Khim., No 8, 1959, 27769.

Author : Tuszynski, K.

Inst :

Title : Metrological Characteristics of Continuous Gas Analyzers.

Orig Pub: Pomiary, Automat, Kontrola, 4, No 5-6, 223-226 (1958)  
(in Polish with German and Russian summaries).

Abstract: The author discusses general questions pertaining to  
the technology of automatic gas and liquid analysis,  
e.g., classification of analyzers, their metrological  
characteristics, sources of error, calibration methods,  
and performance checks. -- Yu. Skoretskiy.

Card : 1/1

134

POLAND/Chemical Technology. Chemical Products  
and Their Applications. Instruments and  
Automation.

H-3

Abs Jour : Ref Zhur-Khimiya, No 7, 1959, 23674

Author : Tuszynski, K.

Inst

Title : Certain Problems in the Automation of  
Chemical Industry. Parts I and II.

Orig Pub : Przem. chem., 1958, 37, No 5, 332-334,  
No 6, 401-405

Abstract : General problems of automation encountered  
in the processes of chemical industry are  
reviewed. -- Yu. Skorenskiy

Card : 1/1

H-7

TUSZYNSKI, KAZIMIERZ

POLAND / Chemical Technology. Chemical Products and  
Their Application. Checking-Measuring Instruments. Automatic Regulation. H

Abs Jour: Ref Zhur-Khimiya, No 19, 1958, 64749

Author : Tuszynski Kazimierz

Inst :

Title : Problems Connected With the Application of Measuring Instruments and Automatic Regulators in the Chemical Industry.

Orig Pub: Pomiary, automat., kontrola, 1957, 3, No 9, 345-349

Abstract: A review of the situation existing in the USSR with regard to the output of measuring instruments and components for automatic regulation of chemical-industry processes: temperature-pressure gages, liquid and gas input gages; electronic compensators and bridges, pH meters, photocalorimeters,

Card 1/2

POLAND / Chemical Technology. Chemical Products and  
Their Application. Checking-Measuring Instru-  
ments. Automatic Regulation. H

Abs Jour: Ref Zhur-Khimiya, No 19, 1958, 64749

Abstract: nephelometers, analyzers, and other apparatus.  
The state of these subjects in the Polish Peoples'  
Republic is discussed.

Card 2/2

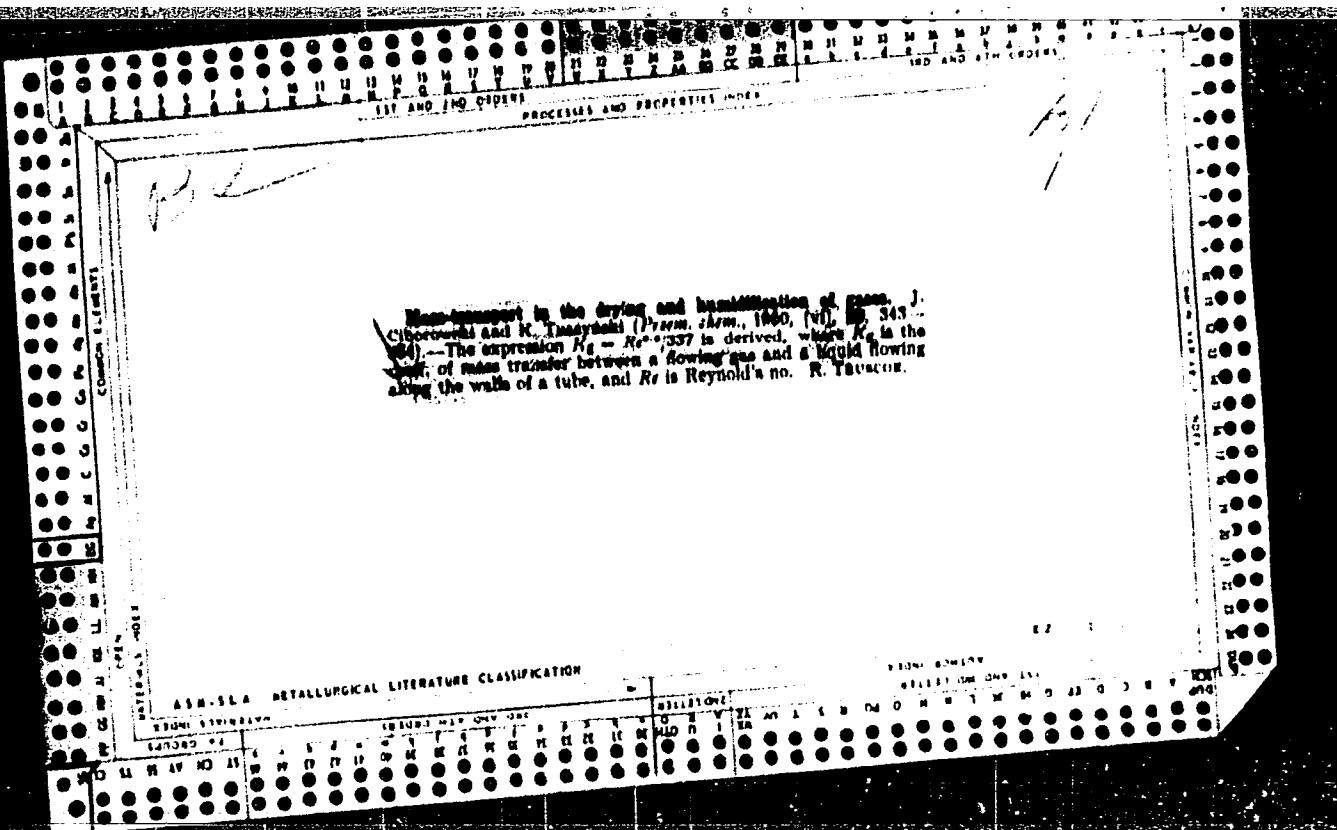
STEPLEWSKI, Bohdan; TUSZYNKI, Kazimierz

Rectification as an object of regulation. Przem chem 40 no.8:419-421  
Ag '61.

MANCZAK, Kazimierz; TUSZYNSKI, Kazimierz

External control and regulation. I. Their bases. Przem. chem  
40 no.12:669-671 D '61.

1. Zaklad Automatyzacji, Instytut Chemii Ogolnej i Zaklad  
Automatyki, Polska Akademia Nauk.



*Apparatus*

*CA*

Designing chemical laboratories. J. Minczewski and K.  
Tuszynski ( Warsaw Politech, Poland). *Przemysl Chem.* 30,  
675-82 (1951).—A review.  
Frank Gonet

P.T. 4.

Chemistry & Chemical  
Technology

540

64123 66-0738 66-07431

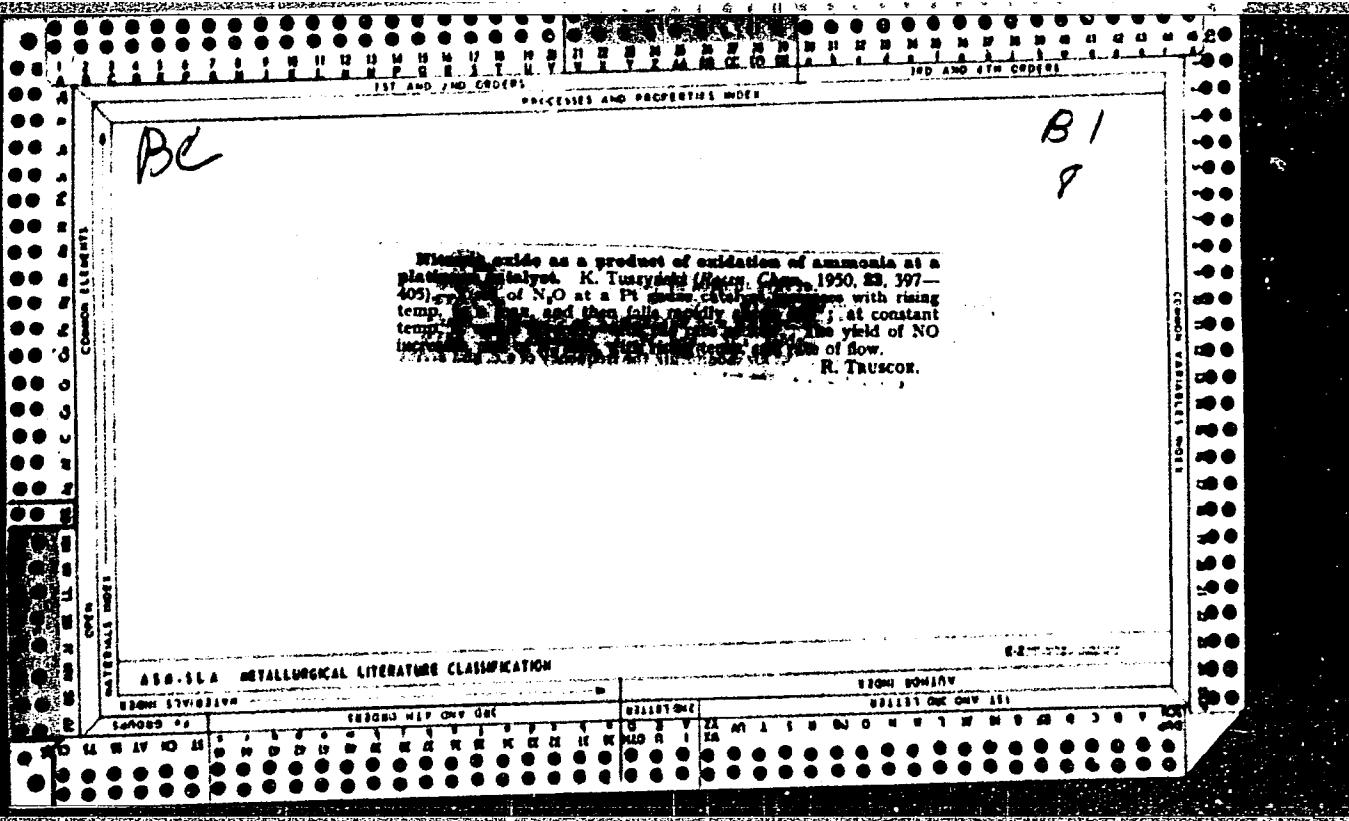
Ciborowski J., Tuszynski K. Mass-Transfer in the Drying and Hu-  
midifying Process of Gases."O przenoszeniu masy przy suszaniu i nawilzaniu gazow" Prze-  
mysł Chemiczny No. 6, 1950, pp. 343-354, 7 figs., 4 tabs.

A number of experiments have been made with mass-transfer inside a column with wetted walls, on the scheme of air-water or aqueous solution. Such conditions were chosen as to allow either drying or humidifying of air. It appears that under normal pressure at room temperature --- results can be summed up in the equation:  $K_t = R_a \cdot \Delta / 337$ . This confirms investigations hitherto performed, consisting only of humidifying the air through contact with pure water. The equation quoted is also valid for concentrated aqueous solutions, which proves that resistance offered by the liquid boundary layer is meaningless, while the main resistance for mass-transfer is set by the boundary layer of gas.

CA

Mass transfer in drying and air conditioning. J. Ciborowski and K. Tuzyński. *Przegl. Chem.* 6(29), 343-64 (1960).—The results of mass transfer measurements in air drying and humidifying are reported. The humidifying process was carried out with aq. saline, in a vertical wetted-wall tower. The psychrometer technique was used for gas-humidity meas. For air flow at normal pressure and room temp., the mass transfer coeffs. for drying and humidifying can be expressed by a simple equation  $K_g = Re^{0.1}/337$ , which is in good agreement with Gilliland's exptl. data (C.A. 32, 8842). The same equation is also valid for concd. aq. saline, provided the depression of  $H_2O$  vapor pressure of the soln. is taken into account in the calcn. of the mass transfer coeffs.

Frank Gonet



CA

2

Nitrous oxide as a product of oxidation of ammonia  
on platinum catalyst. Kashiwa, Tsumayashi, Kocasib  
Chem. 29, 397-405 (1968).--Investigations were made at  
temp. range 218-666° and under various times of contact  
with the catalyst. The formation of  $N_2O$  is favored by  
low temp. and low rate of flow of gases. The yield of NO  
rises with increasing rate of flow and increasing temp.  
The amt. of free N at const. temp. falls as the rate of flow  
increases, and also with increasing temp. S. N.

ACCESSION NR: AP4042110

P/0015/64/000/006/0141/0143

AUTHOR: Dobrzanski, Maciej; Tuszyński, Waclaw

TITLE: Honeycomb quasiceramic - a new building material

SOURCE: Szklo i ceramika, no. 6, 1964, 141-143

TOPIC TAGS: structural material, ceramic, honeycomb ceramic, quasiceramic, temperature resistance, noise resistance, soundproofing, honeycomb quasiceramic

ABSTRACT: A new temperature-resistant and noise-excluding material is described which is manufactured from quasiceramic powder F-6 and a foaming agent such as soot or strontium carbonate. Depending on the temperature, time of foaming, and amount of foaming agent, the material has a bulk density of 1670 to 500 kg/m<sup>3</sup>. The pores are closed, and absorption, which occurs only on the surface, amounts to about 0.5%; for glass this value is about 8%, and for cellular concrete it is about 30 to 70%. The softening temperature is 800 C, a maximum which the material can withstand for some time; glass foam softens at 520 C, and cellular concrete cannot withstand temperatures above 200 C. The quasi-ceramic has high compressibility compared with other materials. It can be used as a heat and cold insulator in the home and industry, and as soundproofing and

Card 1/2

ACCESSION NR: AP4042110

structural material. The materials has been studied only since November 1963, and the data presented here are still inconclusive; however it is believed that the honeycomb quasiceramic is in all respects a major breakthrough in structural materials. Orig. art. has: 5 figures and 1.table.

ASSOCIATION: Instytut Przemyslu Szkla i Ceramiki, Warsaw (Institute for the Glass and Ceramic Industry)

SUBMITTED: 00 ENCL: 00

SUB CODE: GMT 70 NO REF Sov: 001 OTHER: 005

Card 2/2

TUSZYNSKI, Wacław

Determination of the  $B_2O_3$  content in glass applying the  
neutron method. Szkło i Ceramika 13 no.2:33-38 F '62.

BRUECKMAN, Andrzej; TUSZYNSKI, Wieslaw

Application of radicisotope of  $^{24}\text{Na}$  to the determination of the technological parameters in the glass production process. Nukleonika 7 no.2:109-114 '62.

1. Adademia Gorniczo-Hutnicza, Krakow (for Brueckman). 2. Centralne Laboratorium Przemyslu Szklarskiego, Szczakowa (for Tusynski).

TUSZYNSKI, W.

The influence of the glass mass on the composition and the individual components. p. 239.  
(SZKLO I CERAMIKA. Vol. 8, no. 9, Sept. 1957, Warszawa, Poland)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 12, Dec. 1957.  
Uncl.

POLAND/Chemical Technology - Chemical Products and Their  
Applications - Ceramics, Glass, Bonding Materials,  
Cements.

H.

Abs Jour : Ref Zhur - Khimiya, No 11, 1958, 36992  
Author : Tuszynski Wacław  
Inst :  
Title : Effect of the Glass Mass on Furnace Charge Components and  
on the Speed on Its Baking.  
Orig Pub : Szkło i Ceramika, 1957, 8, No 9, 239-241

Abstract : In order to study the effect of glass mass on furnace  
charge fusion in the vat ovens, the authors conducted  
isothermal studies of decomposition of the charge com-  
ponents, as well as studies of reactions occurring in  
different charging tests and in the charge which comes  
in contact with glass. Gravimetric and differential  
thermal methods were used. In contact with glass soda  
decomposition starts below 400°C

Card 1/2

POLAND/Chemical Technology - Chemical Products and Their  
Applications - Ceramics, Glass, Bonding  
Materials, Cements.

H.

Abs Jour : Ref Zhur - Khimiya, No 11, 1958, 36992

(softening temperature of this glass being 500°C).  
Vigorous decomposition occurs at 600°C. Limestone  
is also decomposed considerably faster in a glass  
medium than in the crucible. In order to speed up the  
digestion process, the author recommend improvement of  
contact of charge components with the glass.

Card 2/2

30

TKS by WO W - 14-6-1-44

POLAND/Electricity - Dielectrics

G-2

Abs Jour : Ref Zhur - Fizika, No 3, 1958, No 6199

Author : Tuszyński Waclaw

Inst : Not Given

Title : Electric Conductivity of Glass

Orig Pub : Szklo i ceram., 1956, 7, No 6, 165-168

Abstract : A survey of elementary information on the volume and surface electric conductivity of glass, and on the influence of the temperature and of gases on the electric conductivity.

Card : 1/1

*Tuszynski, W.*

USSR/Chemical Technology. Chemical Products and Their Application -- Food industry,  
I-28

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 6685

Author: Tuszynski, Wojciech

Institution: None

Title: Milk Processing Plant at Odisted (Danemark)

Original  
Publication: Przegl. mleczarski, 1955, 3, No 9, 19-22

Abstract: The floor plan is given of the ground floor of the plant put in operation in 1954, having a yearly output of about 13 million liters of milk, 1/3 of which is made into cheese; also a description of the plant equipment.

Card 1/1

TUSZYNSKI, Waclaw; SIUDYKA, Stanislaw

Quality control of Foucault glass. Szklo 13 no.1:10-17 Ja '62.

P/015/62/000/002/001/002  
D001/D101

AUTHOR: Tuszynski, Wacław

TITLE: Determination of  $B_2O_3$  content in glass by means of the neutron method

PERIODICAL: Szkło i ceramika, no. 2, 1962, 33-38

TEXT: With due resort to available reference material, a method of measuring  $B_2O_3$  content in glass was tried out which makes use of boron's high capture cross section for thermal neutrons. The system operated on a Ra-Be neutron source of  $3 \cdot 10^5$  counts per second, a paraffin moderator, a water suspension of pulverized glass subject to  $B_2O_3$  content tests, a gaseous  $BF_3$  counter for neutron-knocked recoil protons, and a protective shield of boric acid. The attenuation factor for incident and emergent radiation was used to evolve a formula for the  $B_2O_3$  mass contained in a glass sample:

$$m = \frac{\log \frac{I_0}{I}}{\varphi \cdot \log e} \quad (7)$$



Card 1/2

Determination of .....

P/015/52/000/002/001/002  
D001/D101

$I_0$  = incident radiation;  $I$  = emergent radiation;  $e$  = base of natural logarithm;  
 $\rho = \sigma Kx$ , where  $\sigma$  = cross section,  $K$  = proportionality coefficient,  $x$  = distance  
traversed. The method is advocated for simplicity, speedy results and feasible  
accuracy. There are 6 figures and 7 tables.

Card 2/2

✓

TUSZYNSKI, Waclaw

Choosing the optimal composition of window glass obtained by the  
drawing method. Szklo 12 no.11:329-334 N '61.

TUSZYŃSKI, W.

"Produkcja koncentratów mleka i laktozy" (Production of milk concentrates and lactose), by W. Tuszyński. Reported in New Books (Nowe Ksiazki), No. 13, July 1, 1955

TUSZYNSKI, WACLAW

POLAND / Chemical Technology, Chemical Products and H  
Their Application, Part 2. - Ceramics, Glass,  
Binders, Concretes. - Glass.

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 61710.

Author : Wacław Tuszyński.

Inst : Not given.

Title : Technological "Length" of Glass.

Orig Pub: Szkło i ceramika, 1957, 8, No 11, 294 - 296.

Abstract: It was found by computing the cooling duration of a glass marble of 1 cm radius from the temperature corresponding to the viscosity of  $10^3$  poise to the temperature corresponding to the viscosity of  $10^7$  poise (border temperature of producing window glass with Furko machines) that the so-called glass "length expressed by the cooling duration depended not only on the temperature difference, but also on the specific

Card 1/2

34

POLAND / Chemical Technology, Chemical Products and H  
Their Application, Part 2. - Ceramics, Glass,  
Binders, Concretes; - Glass.

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 61710.

Abstract: gravity and specific heat of glass. The greater the specific weight and the specific heat are, the longer is the cooling duration. It is shown on examples of "length" computation of some Polish glass computed from the temperature difference between the viscosities of  $10^3$  and  $10^6$  to  $10^7$  poise and the rate of marble cooling that the glass "length" according to the temperature difference and the "length" according to the cooling duration are different; for example, the longest glass according to the temperature difference (aluminous) is the "shortest" according to the cooling duration. The magnitude of the glass "length" according to the cooling duration and not according to the temperature difference is important for rolling.

Card 2/2

TUTA, Calin

How the cost price of a ton of wheat was reduced. Munca sindic [7]  
no.1:28-30 Ja '63.

1. Presedinte al comitetului sindicatului Gospodarile Agricole de  
Stat Oltenita, regiunea Bucuresti.

Country : RUMANIA

Category: Cultivated Plants. Fruits. Berries.

M

Abs Jour: RZhBiol., No 22, 1958, No 100429

Author : Popescu, M.; Oprean, M.; Manolache, E., Tuta, V.

Inst : -

Title : Behavior of Fruit Trees on Sands in the First Year  
After Planting.

Orig Pub: Gradina, via si livada, 1957, 6, No 8, 40-45

Abstract: From the experience of growing fruit trees on  
the sands in the south of Oltenia (Rumanian  
People's Republic), it follows that fruit trees  
planted in deep pits (depth of 1.2-1.5 meters),  
have the most vigorous growth and the smallest  
percentage of withering in the first year after

Card : 1/4

Country : RUMANIA  
Category: Cultivated Plants. Fruits. Berries.

M

Abs Jour: RZhBiol., No 22, 1958, No 100429

planting. In deep pits, the trees develop well even in the conditions of prolonged drought. Planting fruit trees in the sands in ordinary pits (depth of 0.8 meters) proved to be unsuccessful because of insufficient water in the upper layer of the soil. The direction of the rows of the trees from the north to the south (perpendicularly to the dunes which have formed) proved to be suitable for all fruit trees in the conditions of the sands in the south of Oltenia. Almond, apricot and peach trees had vigorous growth and a minimum percentage of withering. Proved to be weakest were sweet cherry, apple and pear trees, and berry bushes

Card : 2/4

M-144

Country : RUMANIA  
Category: Cultivated Plants. Fruits. Berries.

M

Abs Jour: RZhBiol., No 22, 1958, No 100429

(currant, raspberry, gooseberry). There was a good growth of the branches on the stocks of mirabelle (137.1), almond (105.4), peach (90.8), ungrafted apricot, cherry. The stocks - dwarf apple, quince, paradise apple, pear - proved to be weak. On the sands, different varieties of fruit trees behaved differently. Some developed very well: Anna Shpet, Agen, Green-gage (plum), Rozovyye shchekki (apricot), Elberta (peach), Belyy naliv (apple); others - middling well: Parthen zolotoy (apple), Paviot (apricot), a plum variety Vinote. The fruit trees of Gortenziya variety (cherry) withered.

Card : 3/4

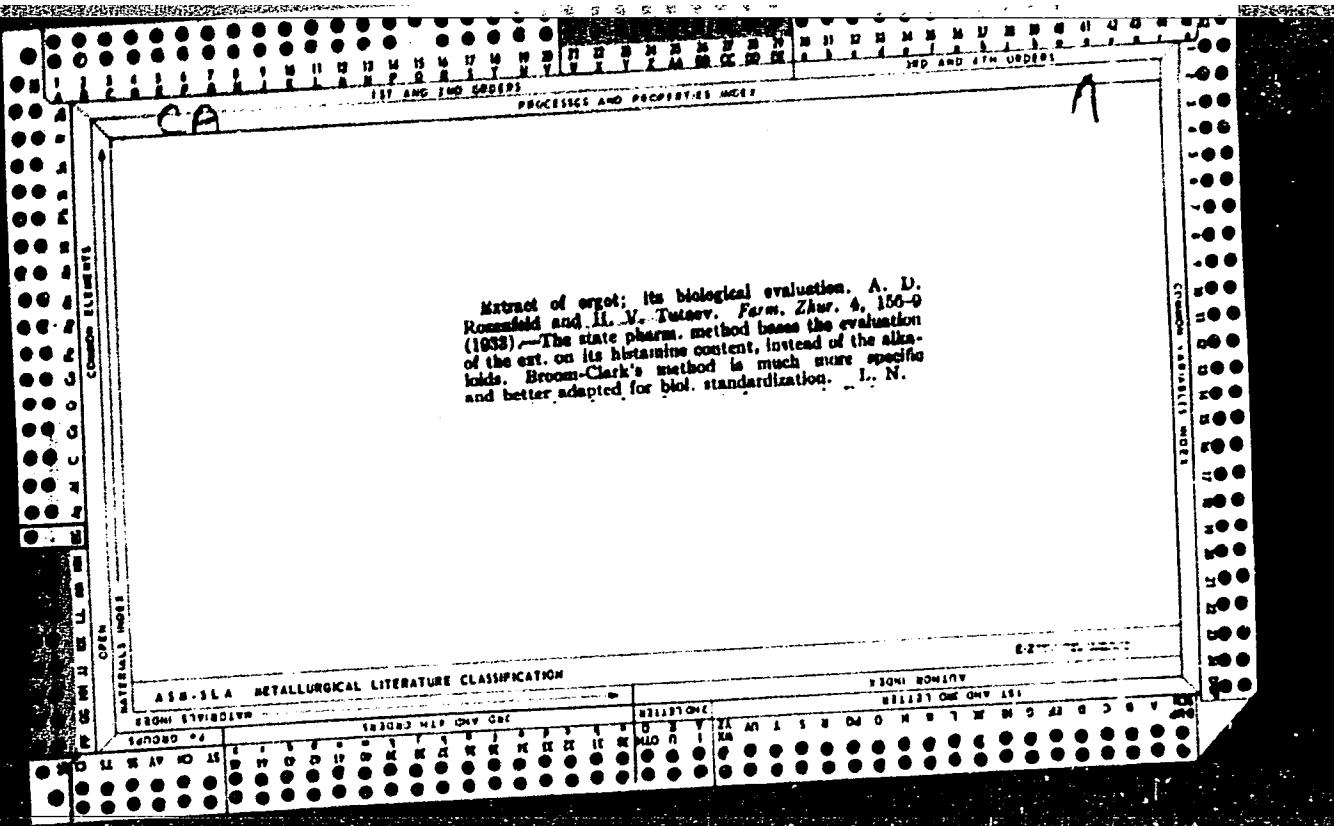
Country : RUMANIA  
Category: Cultivated Plants. Fruits. Berries.

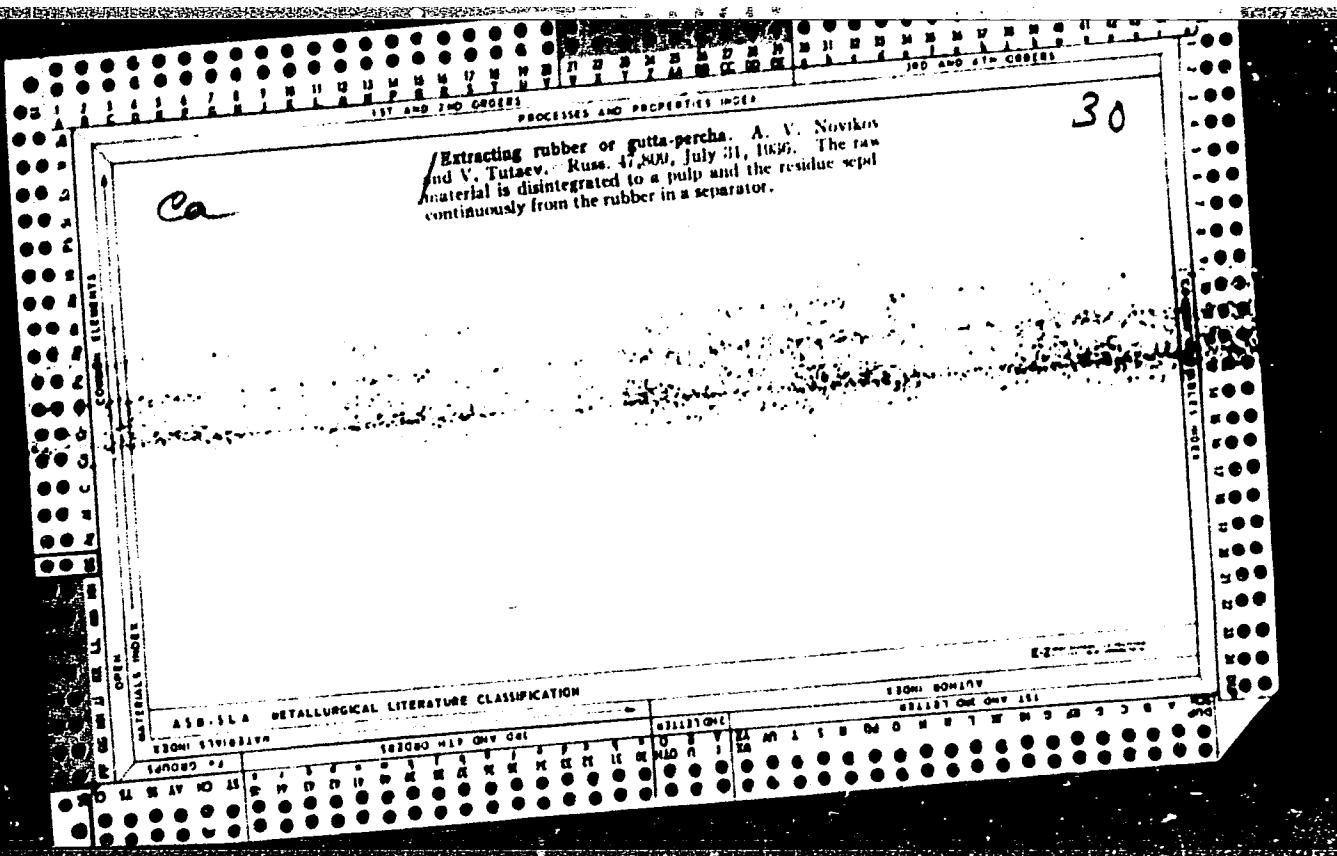
Abs Jour: RZhBiol., No 22, 1958, No 100429

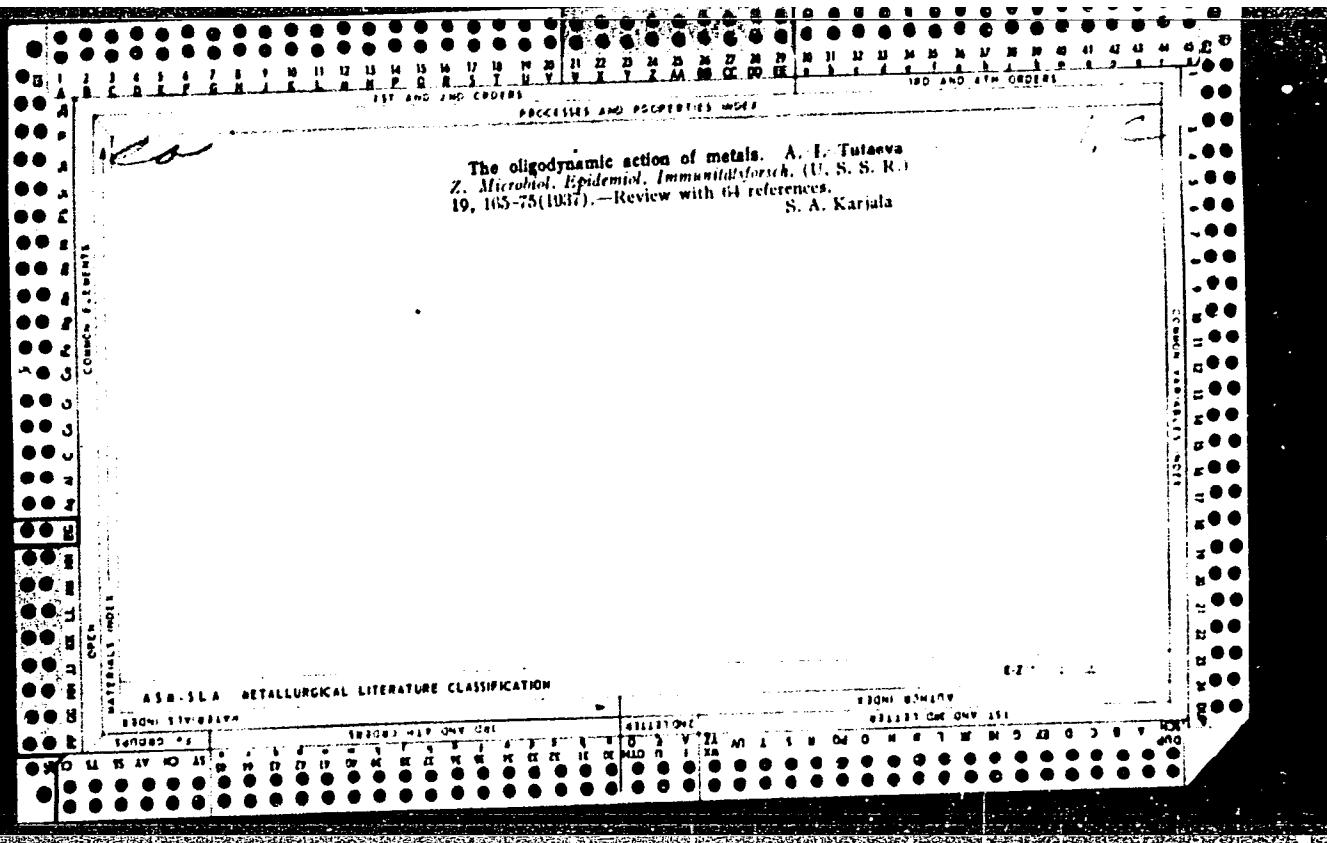
The best one is from Hungary (apricot) and  
Pietroase Napoleon (sweet cherry). -- Ye. T.  
Zhukovskaya

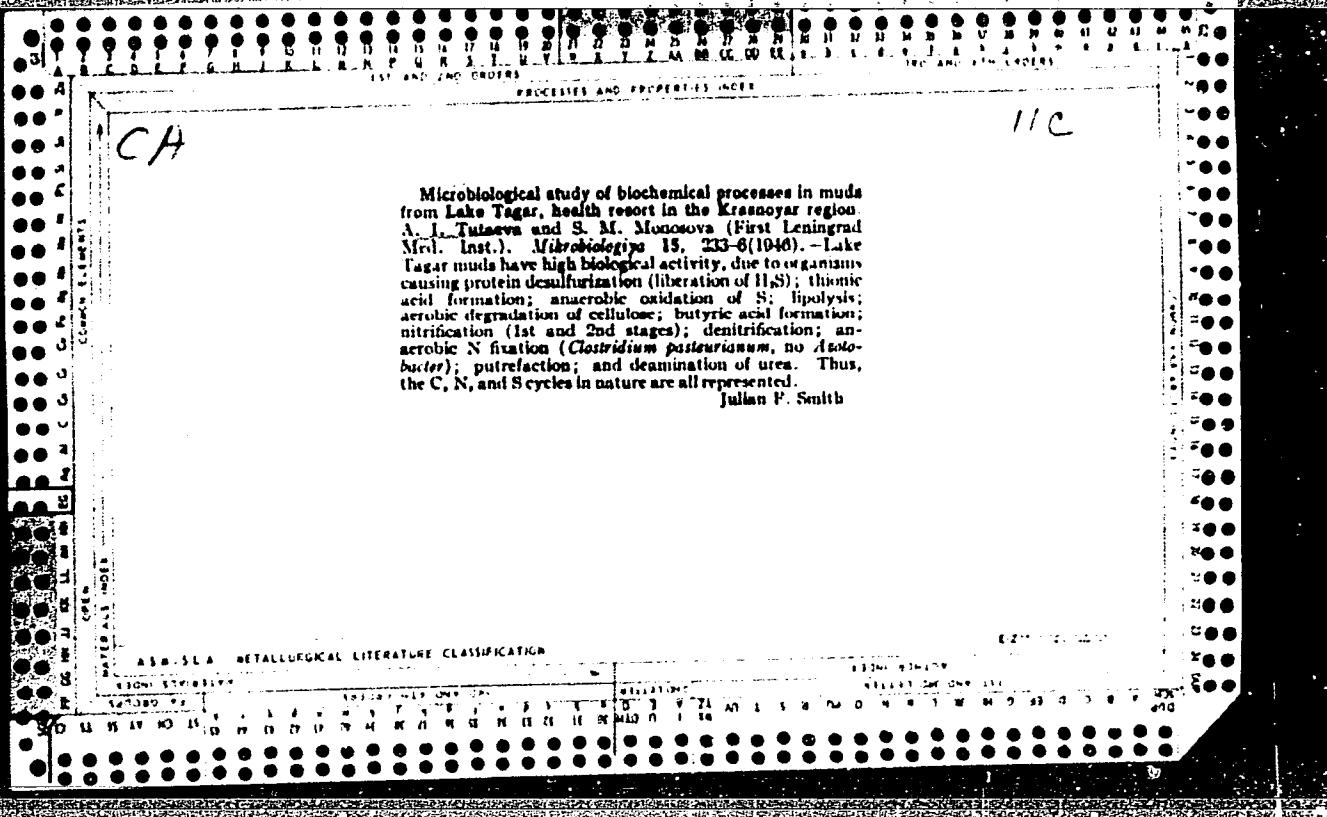
Card : 4/4

M-145









A new method for the preparation of typhoid vaccine through the use of silver permanganate-treated water. A. I. TULAYEV. *Z. Mikrobiol. Epidemiol. Immunobiol.* (U. S. S. R.) 16, 604 (1934) (German 600) (1935). Distilled water, treated for 11 days at 37° by the method of Uglev (C. A. 29, 34387) with silvered sand, the surface of which had been oxidized with 3% KMnO<sub>4</sub> soln., showed a high bactericidal action, sterilizing an emulsion of 0.1 million typhoid bacilli in 24 hrs. The H<sub>2</sub>O showed no harmful effects when given to test animals. The vaccine obtained in this way was less toxic than the normal vaccine heated at 60° for 1 hr., and showed good antigenic characteristics in agglutination and complement-formation reactions. There was no diminution in the antigenic and immunological properties after 8 months, the presence of metallic ions obviating the addn. of other preservatives. S. A. Katsila.

S. A. Katajala

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001757620006-7"

ca

### PROCESSES AND PROCEDURES INDEX

150 AND 470 CUPS;

112

**A new method for the preparation of typhoid vaccine through the use of silver permanganate-treated water.**  
**A. I. Tuzeyev, Z. Microbiol. Epidemiol. Immunobiol.**  
 U.S.S.R. 16, 694 (in German 669) (1951). Distilled water, treated for 6 days at 37° by the method of Uglow (C. A. 39, 34389) with silvered sand, the surface of which had been oxidized with 3% KMnO<sub>4</sub> solution, showed a high bactericidal action, sterilizing an emulsion of 6 million typhoid bacilli in 24 hrs. The H<sub>2</sub>O showed no harmful effects when given to test animals. The vaccine obtained in this way was less toxic than the normal vaccine heated at 50° for 1 hr., and showed good antigenic characteristics in agglutination and complement-formation reactions. There was no diminution in the antigenic and immunological properties after 8 months, the presence of metallic salts obviating the addin. of other preservatives.

S. A. Karjula

484-910 METALLURGICAL LITERATURE CLASSIFICATION  
2041 118102174

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001757620006-7"

TUTAJ, I.

KRKOVÁ, BERNARD, 1992, Vol. 12, No. 2, pp. 113-120

RYBAKOWA, Maria; SZPUNAR, Jerzy; TUTAJ, Ludwika

Gamma globulins in cases of recurrent acute tonsillitis in  
children. Pol. tyg. lek. 19 no.23:861-863 1 Je'64

1. Z II Kliniki Chorob Dzieci Akademii Medycznej w Krakowie  
(kierownik: prof. dr. B. Halikowski), z Kliniki Otolaryngow-  
ologicznej Akademii Medycznej w Krakowie (kierownik: prof. dr.  
J. Miodonski [deceased]) i z Pracowni Chemicznej III Kliniki  
Chorob Wewnętrznych Akademii Medycznej w Krakowie (kierownik:  
prof. dr. J. Aleksandrowicz).

BAK, Stefan; OSTROWSKA, Aleksandra; SOCHA, Wladislaw; TUTAJ, Ludwika

Effects of arterial blood pressure on the development of experimental arteriosclerosis. Polski tygod. lek. 13 no. 12:421-425 14 Mar 56.

1. Wpływ tetniczego ciśnienia krwi na rozwój doswiadczonej miażdzyicy tetnic Z I Kliniki Chirurgicznej A. M. w Krakowie kierownik: prof. Bogusz J Z III Kliniki Chor. Wewn. kierownik: prof. Aleksandrowicz J i z Zakładu Med. Sadowej kierownik: prof. J. Onlbrycht.

(ARTERIOSCLEROSIS, exper.

eff. of arterial blood pressure on develop. in dogs (Pol))

(BLOOD PRESSURE

eff. of arterial pressure on develop. of exper. arteriosclerosis (Pol))

TUTAK Halina

Studies on the sewages in the cotton bleaching industry.  
Przegl Włokien 17 no. 10:353-355 0 '63.

1. Central Laboratory of the Cotton Industry, Łódź.

P/035/60/000/019/001/004  
A076/A026

AUTHORS: Tutak, Marian, Docent, Engineer; Urbańczyk, Leon, Engineer

TITLE: Machine-Tool Industry of the Poznań District - Machine Tool Production of the H. Cegielski Plant

PERIODICAL: Przegląd Mechaniczny, 1960, No. 19 - 20, pp. 585 - 589

TEXT: The Poznań district, especially Poznań City, is one of the most important centers of the Polish machine-tool industry. Among the large machine-tool plants in Poznań the authors list: the Zakłady Przemysłu Metalowego H. Cegielski (Metal Industry Plant H. Cegielski), the Wielkopolska Fabryka Urządzeń Mechanicznych Wiepofama (Wielkopolska Mechanical Equipment Plant Wiepofama), the Fabryka Obrabiarek (Lathe Plant) in Pleszew, the Fabryka Obrabiarek in Jarocin, the Poznańska Fabryka Maszyn i Urządzeń (Machine and Equipment Plant) in Poznań, and the Żnińska Fabryka Maszyn (Żniń Machine Plant) in Żniń. Further, the authors outline the production history of the H. Cegielski plant, covering the periods 1937 - 1939 and 1945 - 1959. From 1946 to 1959, the H. Cegielski plant produced 45 types of machine-tools and 6 types of presses, 5 of which were produced by the Fabryka Parowców (Locomotive Plant). By the end of 1959, the H. Cegielski plant had produced

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A076/A026

Machine-Tool Industry of the Poznań District - Machine Tool Production of the H. Cegielski Plant

10,199 machine-tools and 294 presses. The plant produces: wall-type drilling machine Ws 2.5; radial drill with table Type Wrs 25/0.8; radial drill Types Wr 50/1.6 and 50/2; Wr 80/2.5 and Wr 80/3.2; radial bed drilling machines Types Wrl 50/2, Wr 80/2.5 and Wrl 80/3.2. The symbols indicate: first number - maximum drilling diameter in steel and the second number - maximum spindle radius. Capstan lathes are the basic product of this plant, and until 1959 about 41% of the total production consisted of these lathes. Up to now, the following types were produced: RH16, RH25, Rhr25, Rh32, Rv32, Rv40, RVA, Rva50, Rva63, RVL63, Rv80, and RVP100. The symbols indicate - "H" or "h" horizontal and the letter "V" or "v" vertical axis of the capstan headstock. The number indicates the biggest rod diameter. The RH16 and RH25 capstan lathes are the most modern in their class having multi-phase motors. Capstan lathes Type Rh32 and Rv32 were produced since 1949, the latter was replaced by the Rv40 in 1950. Production of the Rhr25 lathe and the RVA type lathe with 4 and 6 openings in the headstock was also stopped in 1950. After the production of light lathes was mastered, production of heavy lathes type Rv80 and Rv50 was taken up. Both types were hydraulically program-controlled, while the Rva50 and Rva63 have mechanical pre-selectors. The need of lighter and simple lathes caused the

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P/035/60/000/019/001/004  
A076/A026

Machine-Tool Industry of the Poznań District - Machine Tool Production of the H. Cegielski Plant

RVL63 capstan lathe to be designed, which replaced the capstan lathe Types Rv50, Rva50 and Rva63. For heavy-duty machining the RVP100 capstan lathe was designed. After 1965, in addition to the RH16, RH25 and RVL63, the following capstan lathes will be produced: the RVA40, the RVA63 and the RVA100. The production of single-spindle turning lathes began in 1954, and after a short time the AJ25 turning lathe was substituted with the ATL40 type, which was based on a Czech lathe produced by Skoda. On the last Poznań Fair, a new type of turning lathe, the ATA20, was exhibited. This new type is similar to the ATL40 lathe, with same operating principles, but a number of modern solutions. According to plans the production of this type of lathes will be increased. The first milling machines Type Ful were produced in 1947, and later were replaced by the Fula, the production of which was stopped. Radial saws Type Cr71 were first produced in 1947, and in 1957 a new type, the CRA 710, was designed. This type has a dosing pump which regulates the feed, while the Cr71 was equipped with a throttle. In addition, the feed bed was reinforced and the hydraulic feed drive engine was replaced with an electric motor equipped with a control. The growing trend of automating production processes resulted in the design of a new model of the CRA 710 radial saw, the CRB 710. Both

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A076/A026

Machine-Tool Industry of the Poznań District - Machine Tool Production of the H. Cegielski Plant

types have the same main drive and some hydraulic parts, but the CRB 710 radial saw operates with automatic repetition of its cycle. According to production plans the number of lathe types will be reduced and only capstan and automated capstan lathes will be produced by the H. Cegielski plant. Other types will be built by other plants. There are 13 photographs and 1 figure.

ASSOCIATION: Zakłady H. Cegielski, Poznań (H. Cegielski Plant, Poznań)

Card 4/4

TUTAK, M.

Timely standardization problems in the machine-tool industry. p. 583.

PRZEGLAD MECHANICZNY. (Stowarzyszenie Inżynierow i Technikow Mechanikow Polskich) Warszawa, Poland, Vol. 18, no. 18, Sept. 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. 9, no. 1, Jan. 1960.

Uncl.

TUTAK, Marian, doc. inz.

The RVB 40 turret lathe. Mechanik 35 no.5:259-261 Ky '62.

1. Zaklady Henryka Cegielskiego, Poznan.

TUTAK, M.

Type CRB 710 circular saw. p. 257.

MECHANIK. Warszawa, Poland. Vol. 32, no. 5, 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 9, no. 2, Feb. 1960.  
Uncl.

TUTAEV, P. M., VALFER, A. V., ANTUFYEV, Yu. P., GOFCHAR, V. Yu.,  
TZEEVO, S. P., KORNETS, E. G., and L'VOV, A. N.

"Investigation of gamma-Radiation from  $\text{Si}^{30} (\text{p}, \gamma) \text{P}^{31}$  Reaction,"

paper submitted at the A-U Conf. on Nuclear Reactions in Medium and Low Energy Physics, Moscow, 19-27 Nov 57.

Physico-Tech. Inst. Acad. Sci. Ukr SSR

(Phys. Tech. Inst. Acad. Sci. Ukr SSR)

"Polarization of  $\gamma$  Radiation from the  $\text{Si}^{30} (p, \gamma) \text{p}^{31}$  Reaction,"

paper submitted at the All-Union Conf. on Nuclear Reactions in Medium and Low Energy Physics, Moscow, 19-27 Nov 57.

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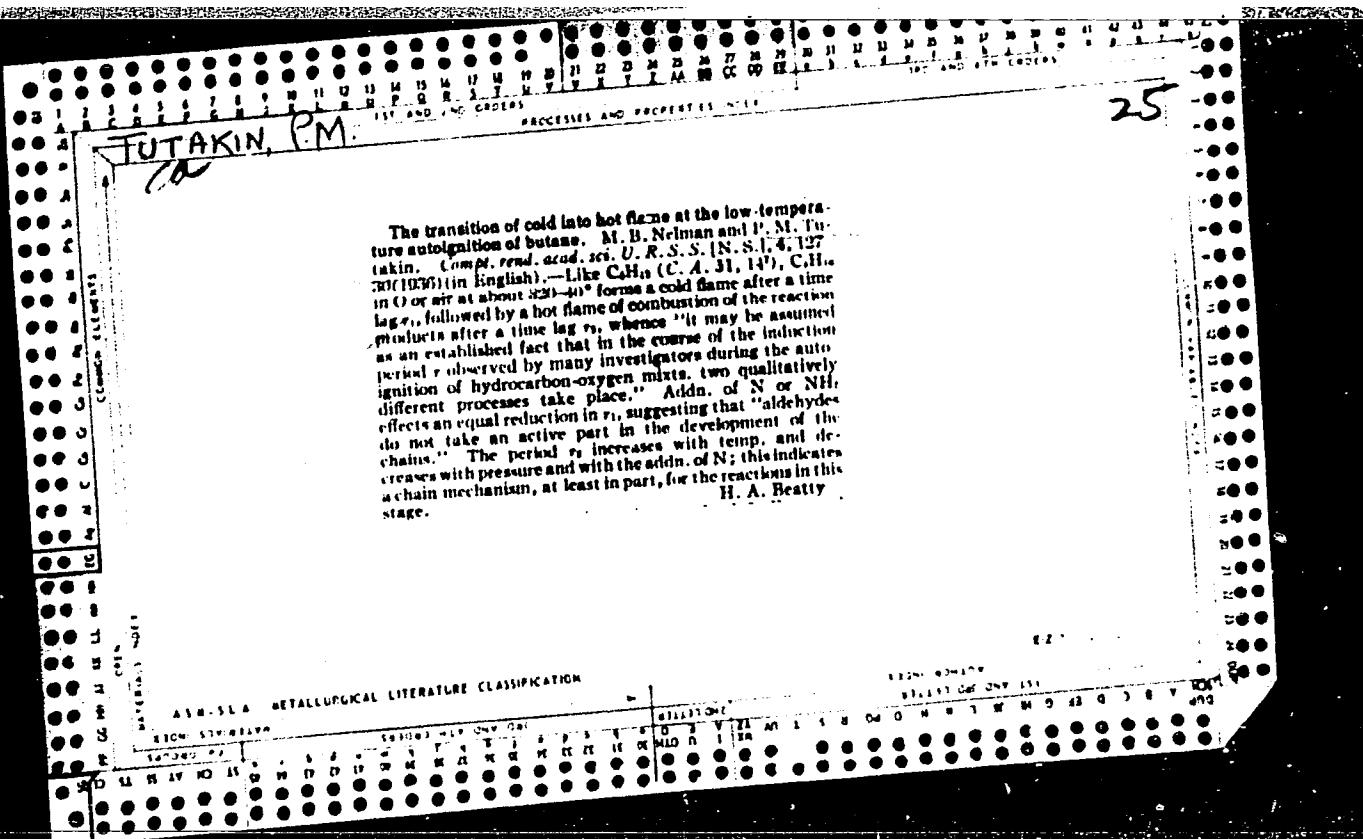
AUTHORS Tutakin P.M., Tsytko S.P., Lvov A.N., Valter A.K., 89-10-16/36  
Gonchar Yu.V.

TITLE The Polarization of  $\gamma$ -Radiation Occuring in the Reaction  $Si^{30}(p,\gamma)P^{31}$ .  
(Polyarizatsiya  $\gamma$ -izlucheniya, voznikayushchego v reaktsii  
 $Si^{30}(p,\gamma)P^{31}$ . - Russian)

PERIODICAL Atomnaya Energiya, 1957, Vol 3, Nr 10, pp 336-338 (U.S.S.R.)

ABSTRACT The  $\gamma$ -radiation observed with the decay of the excited state with 8,2 MeV energy ( $J=3/2$ ) in  $P^{31}$  into the ground state ( $J=1/2+$ ) is distinctly polarized.  
From the experimentally found angular distribution of the photo-protons there follows  $(R-1) = -0,51$  or  $R=0,49$ .  
The  $\gamma$ -transition 8,2 MeV belongs to the  $M_1$ -type and therefore the level must have 8,2 MeV, spin and parity  $3/2 +$ .  
The angular distribution of the 8,2 MeV -  $\gamma$ -transition has the form  $\omega(\gamma) \sim 1 - a_2 \cos^2 \gamma$  with  $a_2 = -0,34 \pm 0,12$ , from which it follows that the 8,2 MeV must be a mixture of  $M_1 + E_2$ .  
There are 3 figures and 1 Slavic reference.

SUBMITTED June 20, 1957  
AVAILABLE Library of Congress.  
Card 1/1



14 TAK. N, P.M.

15

Card 3/3

APPROVED FOR RELEASE: 04/03/2001

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TUTAKIN, P.M.

BC

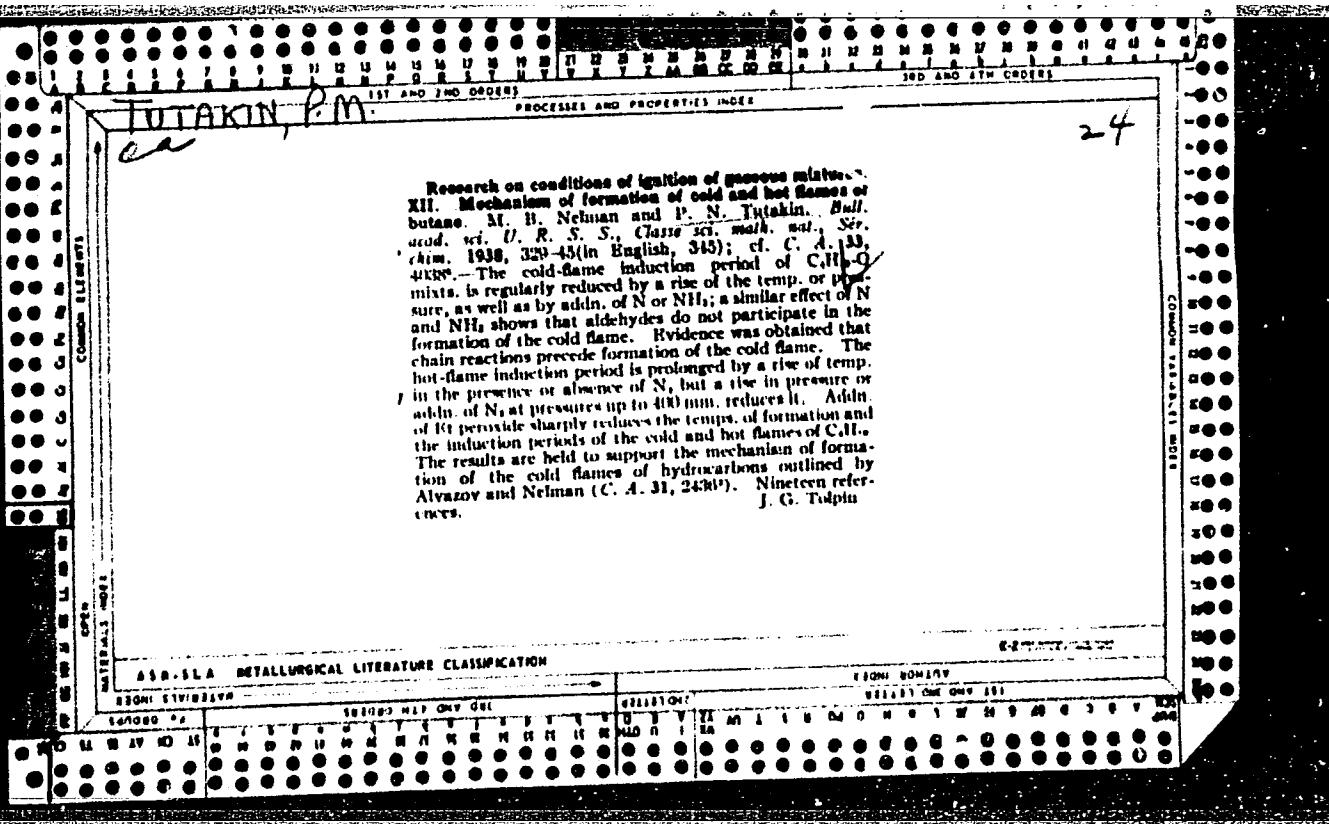
a-1

Mechanism of the formation of cold and hot flames of butane. M. B. NEUMANN and P. M. TUTAKIN (Acta Physicochim. U.R.S.S., 1938, 9, 861; 884, and Bull. Acad. Sci. U.R.S.S., 1938, Ser. Chim., 329-345).—The induction period,  $t_1$ , of the cold flame

of  $C_4H_{10}$  decreases with increasing pressure and temp. Comparison with data for  $C_6H_6$  suggests that as the hydrocarbon mols. become more complex, changes in pressure and temp. exert stronger influences on  $t_1$ . Addition of  $NH_3$  or  $N_2$  decreases  $t_1$ . The induction period,  $t_2$ , of the hot flame increases with increase in temp. and with decrease in pressure, and decreases with the addition of  $N_2$ . The crit. pressure,  $p_1$ , and temp. of spontaneous combustion of  $Et_2O_2$  are connected by  $\log p_1 = (2300/T) - 3.687$ . Below  $p_1$  the decomp. of  $Et_2O_2$  is a first-order reaction. Additions of  $Et_2O_2$  to  $C_4H_{10}-O_2$  mixtures reduce both flame temp. and  $t_1$  and  $t_2$ . The data are discussed with reference to the chain theory of reactions.

C. R. H.

ASR-SEA METALLURGICAL LITERATURE CLASSIFICATION



ACCESSION NR: AP4012517

S/0056/64/046/001/0010/0017

AUTHOR: Tutakin, P. M.

TITLE: Polarization of Gamma Rays from the reaction  $\text{Si}^{30}(\text{p}, \gamma)\text{P}^{31}$

SOURCE: Zhurnal eksper. i teoret. fiz., v. 46, no. 1, 1964, 10-17

TOPIC TAGS: Gamma ray polarization, Si-30 proton reaction, heavy water emulsion technique, resonance level spin, resonance level parity, proton Gamma correlation, proton Gamma Gamma correlation, elastic scattering, gamma ray angular distribution, inelastic scattering

ABSTRACT: The plane polarization of  $\gamma$  rays from the reaction  $\text{Si}^{30}(\text{p}, \gamma)\text{P}^{31}$ , with resonances at  $E_p = 1514, 3308, \text{ and } 3435 \text{ kev}$ , was measured using photographic emulsions filled with heavy water. The measurement procedure is described elsewhere (Izv. AN SSSR seriya

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ACCESSION NR: AP4012517

fiz. v. 25, 1131, 1961 and ZhETF, v. 43, 1140, 1962). Such measurements provide an additional check on the assignments of the resonance levels. The 8.751 MeV resonance level of  $P^{31}$  ( $E_p = 1514$  keV) has spin and parity  $5/2^+$ : The resonances at  $E_p = 3300$  and 3435 keV were observed simultaneously with a single target and determined from both the elastic proton scattering and the  $\gamma$  yield. It is shown that the spins of the 10.492 MeV and 10.615 resonance levels of  $P^{31}$  ( $E_p = 3308$  and 3435 keV) can be  $3/2$  and  $\geq 5/2$ , respectively. Strict assignments of spins and parities to these levels are made impossible by the lack of  $\gamma$  angle distribution measurements and by the small number of observed photoparton tracks. "The author thanks the group headed by Yu. A. Kharchenko for their assistance in performing the experimental work with the electrostatic generator. Orig. art. has: 7 figures, 3 formulas, and 2 tables.

ASSOCIATION: Fiziko-tehnicheskiy institut AN UkrSSR (Physicotechnical Institute, AN UkrSSR)

Card 2/2

TUTAKIN, P.M.

Polarization of gamma rays from the reaction  $\text{Si}^{30}(\text{p}, \gamma)\text{P}^{31}$ .  
Zhur. eksper. i teor. fiz. 46 no.1:10-17 Ja'64. (MIRA 17:2)

1. Fiziko-tehnicheskiy institut AN UkrSSR.

S/056/62/043/004/003/061  
B102/B180

AUTHOR: Tutakin, P. M.

TITLE: Polarization of gamma rays from the reaction  $Si^{30}(p, \gamma)p^{31}$

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43,  
no. 4(10), 1962, 1140 - 1145

TEXT: To find the spin, and the multipolarity of the transitions of the 8.84-Mev level ( $E = 1393$  kev) the gamma ray polarization in  $Si^{30}(p, \gamma)p^{31}$  reactions was measured for the resonance transitions from the 8.04, 8.20 and 8.24-Mev levels ( $E = 773, 939, 979.5$  kev) to the ground state of the  $p^{31}$  nucleus ( $3/2^+ \rightarrow 1/2^+$ ), and also the intensity of the gamma quanta, emitted at 0 and 90° from the  $Si^{30}$  target. Their polarization was determined by deuteron photo-disintegration (Phys. Rev. 92, 372, 1953) in photographic emulsions impregnated with heavy water. The target was bombarded by an  $H^+$  ion beam at the electrostatic generator of the FTI AN USSR. All the resonance transitions investigated are mixed ( $M1+E2$ ), with two mixing factors,  $\delta$ , possible for each. The following results were obtained:  
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Polarization of gamma ...

S/056/62/043/004/003/061  
B102/B180

773 kev resonance:  $\delta = -2.3$ , i. e. a predominantly E2 emission. 939 kev resonance:  $\delta = -0.15$ : M1 emission with a small admixture of E2. 979.5kev resonance:  $\delta = -1.6$ : E2 with M1. A transition to the P3<sup>1</sup> ground state is either purely M1 ( $\delta_1 = -0.03$ ) or E2 with M1 admixture ( $\delta = -1.6$ ). 1393 -kev resonance: Spin and parity of this resonance level is 5/2<sup>+</sup>, transition to the first excited level (1.26 Mev. 3/2<sup>+</sup>) is almost purely M1 ( $\delta_1 = 0.02$ ). There are 4 figures.

ASSOCIATION: Fiziko-tehnicheskiy institut Akademii nauk Ukrainskoy SSR  
(Physicotechnical Institute of the Academy of Sciences of  
the Ukrainskaya SSR)

SUBMITTED: April 14, 1962

Card 2/2

TUTAKIN, P.M.

Measuring the polarization of  $\gamma$ -rays from the reaction  
 $S_{130}(p, \gamma)P_{31}$ . Izv. AN SSSR. Ser. fiz. 25 no.9:1131-1134  
'61. (MIRA 14:8)

(Gamma rays)  
(Nuclear reactions)

TUTAKIN, P.M.

Measuring the polarization of  $\gamma$ -rays from the reaction  
 $\text{Si}^{30}(\text{p},\gamma)\text{P}^{31}$ . Zhur. eksp. i teor. fiz. 43 no.4:1140-1145  
0 '62. (MIRA 15:11)

1. Fiziko-tehnicheskiy institut AN UkrSSR.  
(Nuclear reactions)  
(Gamma rays)

STRADYN', Ya. [Stradins, J.]; TUTANE, I.; NEYLAND, O. [Neilands, O.];  
VANAG, G. [Vanars, G.], akademik [deceased]

Electrochemical ordinary C-C bond breaking in  
bis-2-phenyl-1,3-indandiones. Dokl. AN SSSR 166 no. 5:634-634  
(MIRA 19:1)  
Ja '66.

1. Institut organicheskogo sinteza AN LatvSSR. 2. MN Latviyskoy  
SSR (for Vanar). Submitted May 10, 1965.

STRADYN', Ya. P.; TUTANE, I.; VANAG, G. Ya.

"Polarographic investigations of indandione-1, 3 and related compounds."

report submitted for 3rd Intl Polarography Cong, Southampton, 19-25 Jul 64.

STRADYN', Ya. P. [Stradins, J.]; TUTANE, I.K.; VANAG, G. Ya. [Vanags, G.]  
[deceased]

Polarographic study of 2-phenyl-1,3-indandione. Zhur. anal. khim.  
20 no. 11:1239-1247 '65 (MIRA 19:1)

I. Institut organicheskogo sinteza AN Latviyskoy SSR, Riga.  
Submitted December 10, 1964.

TUTANTSEVA, A. M.

Tutantseva, A. M. - "Kinetics of the caustification reaction," Materialy Tsentr,  
nauch.-issled. in-ta bumazh. prom-sti, Issue 37, 1948,  
p. 107-53 — Bibliog: p. 153

So: U-3566, 15 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 13, 1949)

TUTARINOV, I., general-mayor

Thirtieth anniversary of the First Horse Army. Voen. znan. 25  
no.11:22-23 N '49. (MIRA 12:12)  
(Russia--Revolution, 1917-1922)

TUTAYUK, V.Kh.; TAGIYEVA, I.A.

Cytological study of polyploid forms in some mulberry (*Morus L.*)  
species. Dokl. AN Azerb. SSR 21 no.6:59-63 '65. (MIRA 18:12)

*AKSENOV, M. A.*  
L 54368-53      EIT(d)/EVT(m)/EEC(k)-2/EWP(1)/EWP(v)/T/EWP(t)/EWP(k)/EWP(h)/EED-2/ //  
EWP(b)/EWP(1)/EWA(c) Pg-4/Pf-4/Pad/Pg-4/Pk-4 LIP(1) UR/0103/65/026/005/0938/6942  
ACCESSION NR: AP5013852 681.142.6

AUTHOR: Boyarchonkov, M. A.

TITLE: All-Union Conference on magnetic elements of automation and computer  
technique

SOURCE: Avtomatika i telemekhanika, v. 26, no. 5, 1965, 938-942

TOPIC TAGS: electric engineering conference, magnetism conference, computer  
component, automation equipment, automation, electronic data processing

ABSTRACT: The Ninth All-Union Conference on Magnetic Elements of Automation  
and Computer Technology, held in Kaunas from 7 to 10 September 1964, was  
organized by the National Committee of the USSR on Automatic Control, the  
Institute of Power and Electrical Engineering of the Academy of Sciences,  
Lithuanian SSR, the Lithuanian Scientific and Technical Society of the Instru-  
ment Building Industry, and the Institute of Automation and Telemechanics  
of the Main Committee on Instrument Building, Means of Automation, and  
Control Systems under Gosplan and the Academy of Sciences USSR. Over  
450 participants discussed some 90 reports concerning the theory, design,

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58  
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ACCESSION NR: AP5013852

production, and application of magnetic and magnetic-semiconductor elements. Reports were presented for seven areas: digital and analog elements, memory devices, magnetic power devices, magnetic amplifiers and converters, parametrons, and power sources.

At the opening plenary session, M. A. Rozenblat presented a survey of the present state of contactless magnetic elements, which he considers to be one of the most efficient and promising technical means of automation and computer technology. Problems of designing logic elements to provide stable operation for various types of circuits were discussed in a series of reports. B. A. Yefimov and G. N. Chizhukhin reported on the development of modules of ferrite-transistor elements (FTE) which can be used for various types of computers and also for discrete automation for general and special purposes. This system provides reliable operation at a 200-kc clock frequency in the -10 to +50° C temperature range.

The same authors together with M. A. Akdenov reported on the development of a general-purpose heavy-duty FTE which can be used as a cell of a clock-frequency pulse generator or as an independent heavy-duty control.

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ACCESSION NR: AP5013852

element. It is capable of performing command recording or readout of information reaching it in large quantities from a low-power FTE. I. A. Tyumin, B. A. Yefimov, and A. A. Shavrov reported on the development and testing of biax-type logic circuits operating at 1 Mc and performing several logic operations. Advantages cited are: high s/n ratio, about 20; high switching rate, about 2 Mc; and high reliability due to the simplicity of the circuit. Such circuits may also be used in complex logic devices. Additional reports discussed logic circuits using biax-type elements in a working storage device with a nondestructive readout cycle of  $10^{-7}$  sec and a recording time for new information of several microseconds.

L. P. Afionogenov et al. reported on discrete and discrete-analog computer units based on the use of the area of an emf pulse originating in the winding during magnetization reversal in the ferrite. Development of ferrite matrixes which release a voltage pulse at the output with an area proportional to the code supplied at the matrix input was also discussed.

Problems connected with the development of single-wire memory elements with multiaperature ferrite plates were presented by R. A. Lashev.

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